

### TENNESSEE DEPARTMENT OF AGRICULTURE Water Resources Program

December 6, 2011

Ms. Erin O'Brien TDEC L&C Annex, 6<sup>th</sup> Floor Nashville, Tennessee 37243

Dear Ms. O'Brien:

I am writing to inform you that the Tennessee Department of Agriculture (TDA) has reviewed the application for CAFO permit transfer (upon close of sale) for Mr. Mike Henry (previous NPDES Permit NO. SOPC00128). It is anticipated that the sale will close in February 2012.

I am enclosing a copy of everything that Mr. and Mrs. Henry submitted to us. It includes an agreement letter regarding the pending sale between the Morrison's and Henry's, a revised Notice of Intent (NOI) form signed by Mr. Henry, an ortho map, a copy of the CAFO permit issued to the Morrison's in October 2011, the original NOI signed by Mr. Morrison, an Annual Report, litter analysis, and page 1 of the Nutrient Management Plan submitted by the Morrison's. I have enclosed the stamped Approval Stamp form for your review and final approval as well. Mr. Henry will notify the Tennessee Department of Environment and Conservation (TDEC) upon closing. Please let me know if you need anything else.

Sincerely,

Angela L. Warden CAFO Specialist

() le 2. Want

RECEIVED

**DEC 6 8 7011** 

TM Division Of Weter Policion Coatrol

: //enclosures

cc:// Mr. Mike Henry, future owner
Mr. Anthony Morrison, current owner of A & L Farm

# Nutrient Management Plan Requirements

Rules + Patty Henry

The following 9 items need to be submitted at the time the permit is applied for. Additional record-keeping items as outlined in the CAFO rules are also considered part of the nutrient management plan and must be kept on-site. More information on each item can be found in the CAFO rule (1200-4-5-.14).

		<del>-</del> 1.	<b>Two maps: (1.)</b> A <u>map of your farm</u> showing location of any animal barns/houses, compost bins, litter storage bins, manure lagoons/holding ponds, nearby roads, fields to which litter/manure will be applied, <u>and non-application buffer areas around any bodies of water</u> (streams, creeks, rivers, ponds, wells, sinkholes, springs, wetlands, etc.). A hand-drawn map is acceptable and even preferred. <b>(2.)</b> A topographic map of the farm (1:24000 scale, showing 1-mile radius from farm) showing property lines.
Contraction of the second	团	2.	<b>Nutrient budget</b> – this is basically a balance sheet of all manure produced on the farm and all manure spread on the farm or removed from the farm. Application rates for all fields should be based on crop needs, realistic crop yield expectations, and actual manure analyses of nutrient content.
	T	3.	<b>Soil test results</b> for phosphorus and potassium for each application field. These must be taken at a minimum of every five years.
	V	4.	Results of <b>manure analysis</b> from within the past year. Annual manure testing is a requirement for all CAFOs. These results must be included with initial permit application if the farm is in operation. If the farm that is applying for the permit is new and not yet operating, then manure testing results need to be obtained once operation begins. At that point, the manure test results and revised application rates need to be submitted to TDA. Manure test results in subsequent years need to be kept as part of your record-keeping activities.
	T	5.	Results of the <b>Phosphorus Index</b> applied to each field that has a soil test P value of "High" or "Very High". In those situations, this tool will determine whether your application rates will be based on nitrogen or phosphorus.
2 12 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6.	Statement regarding method of <b>dead animal disposal</b> .
	13	7.	Closure Plan to be implemented in the event animal production ceases on the site.

These last two items are only required for medium-size CAFOs that manage liquid manure.

8. Documentation of design of liquid waste handling system. This should include, but is not limited to: volume for solids accumulation, design treatment volume, total design volume, the approximate number of days of storage capacity, pumping and routing of wastes, and any solid separation process. Ideally, this documentation would consist of the pertinent engineering drawings with accompanying descriptive narrative.

9. The construction, modification, repair, or installation of any portion of a CAFO liquid waste handling system (such as earthen holding pond, treatment lagoon, pit, sump or other earthen storage/containment structure) after April 13, 2006 must be preceded by a thorough subsurface investigation. This investigation will include a detailed soils investigation with special attention to the water table depth and seepage potential.

In addition to the items above, the following form(s) must accompany your application:

Notice of Intent form must be submitted with all applications from Class II (Medium) CAFOs OR

TYPEPA Forms 1 and 2B must be submitted with all applications from Class I (Large) CAFOs.

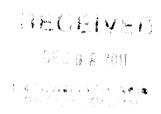
Addendum to Nutrient Management Plan.

Angela,

The farm and permit(s) being referenced are being sold to Michael and Patricia Henry from Anthony and Lisa Morrison. The tentative settlement date is February 2012. The farm is currently owned and operated by the Morrison's who reside at the farm location. Once settlement is complete, the Henry's will reside at the farm location and be the owner/operators.

I have included the completed NOI form for transferring the permits. I have also included copies of existing permits.

Mike Henry



This letter is to document an agreement between Anthony and Lisa Morrison (sellers) and Mike and Patty Henry (buyers) on the sale of real property including an active poultry farm located at 275 Vandergriff Rd Whitwell, TN 37397 Marion County.

Included in the sale is 67 acres, three 40'x500' broiler houses contracted with Koch Foods, Inc., house, workshop, and litter shed. Also included is all necessary equipment to operate the farm.

It is the goal of the sellers and buyers to have final settlement in February 2012.

Upon final settlement it would be the buyers desire to have the current SOPC00128 permit be transferred to them.

By signing below, the sellers and buyers agree to the terms stated above regarding the sale of the property described.

Seller Date

| 1-22-11 |
| Seller Date

| 11-22-11 |
| Date |
| Da

RECEIVED

DE STAND



# Tenne • Department of Environment and Conser on, Division of Water Pollution Control 401 Church Street, 6<sup>th</sup> Floor L & C Annex, Nashville, TN 37243 (615) 532-0625

#### CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) STATE OPERATING PERMIT (SOP) NOTICE OF INTENT (NOI)

Type of permit you are requests Application type:	☐ Nev	v Permit	gned to discharge	Per	rmit Reis		⊠ Pe	nknown, please advise rmit Modification number: SOPC00128	
OPERATION IDENTIFICATI	ON		and the state of t				,		
Operation Name: Mike	& Patty He	nry	_				County:	Marion	
Operation Location/ 275 V	andergriff ]	Rd					Latitude:	35° 12' N	
	well, TN 373						Longitude	: 85° 27' W	
Name and distance to nearest r	eceiving water	r(s):							
If any other State or Federal W	ater/Wastewa	ter Permits have	e been obtained i	for this site, l	ist those	permit numbers	b.		
Animal Type:	ultry [	Swine [	☐ Dairy	Beef		Other			
Number of Animals: 87,000	man a bina conference a browing by the same and a surprising a second account.	Number of B	arns: 3		Name o	f Integrator: Ko	ch Foods,In	c.	
Type of Animal Waste Management:  (check all that apply)    Liquid     Liquid, Closed System (i.e. covered tank, under barn pit, etc.)									
Attach the NMP NMP	Attached A	ttach the closur	e plan 🔲 Clo	sure Plan At	tached	Attach a topo	graphic maj	Map Attached	
PERMITTEE IDENTIFICATION									
Official Contact (applicant):  Title or Position:									
Mike Henry Owner / Operator									
Mailing Address: 431 Anderson Ferry Rd			City: Mount Joy	City: State: Mount Joy PA			Zip: 17552	☐ Correspondence	
Phone number(s): (717)348-5883			E-mail: mhenry@	E-mail: mhenry@pa.net				M invoice	
Optional Contact:			Title or Posit	ion:					
Address:			City:		Ann al illim call	State:	Zip:	Correspondence	
Phone number(s):			E-mail:	E-mail:				☐ Invoice	
APPLICATION CERTIFICATION AND SIGNATURE (must be signed in accordance with the requirements of Rule 1200-4-505)									
I certify under penalty o									
in accordance with a sys	_		-			, .			
submitted. Based on my for gathering the information									
complete. I am aware th									
fine and imprisonment for			pondicios 101	Suommune	, <b>.</b>	/	morading	the possionity of	
Name and title; print or type				Signature	1/	11	1	Date	
Mike Henry Owner/Ope	rator			1/10	il.	1/Kin		12/01/2011	
STATE USE ONLY						Α			
Received Date	Reviewer		EFO		T & E	Aquatic Fauna	Т	racking No.	
ner a z 201	Impaired Receiv	ing Stream		High Quality	Water		N	OC Date	

Page 1 of 1 Print - Maps

### bing Maps

275 Vandergriff Rd Whitwell, TN 37397

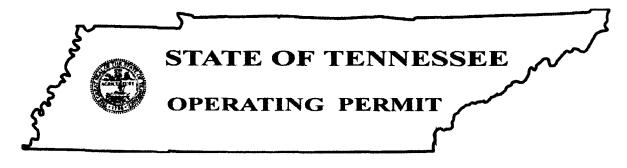
On the goff Use **m.bing.com** to find mass, oreotons, businesses, and mag<sub>ing</sub> (2006) was a RECEIVED

DEC 0 8 2011

TM Division Of Weist forthoo relegion







#### Permit Tracking No. SOPC00128

#### Notice of Coverage For

#### General State Operating Permit for Concentrated Animal Feeding Operations (CAFOs), Permit Number SOPC00000

Issued By
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
401 Church Street
6th Floor, L & C Annex
Nashville, Tennessee 37243

In accordance with the provisions of Tennessee Code Annotated Section 69-3-108 and regulations promulgated pursuant thereto:

Permittee:

Anthony B. Morrison

is authorized:

to operate a concentrated animal feeding operation that does not

discharge and that is not designed, constructed, operated or

maintained such that a discharge could occur

from a facility with:

87,000 animals (Poultry-Broilers) grown for Koch Foods

located at:

275 Vandergriff Road in Whitwell, Marion County, Tennessee

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This notice of coverage shall become effective on:

October 20, 2011

And shall expire on:

May 31, 2015

Issuance date:

October 20, 2011

Paul E. Davis, Director Division of Water Pollution Control

RDAs 2352 and 2366



# Te see Department of Environment and Con ation, Division of Water Pollution Control 401 Church Street, 6<sup>th</sup> Floor L & C Annex, Nashville, TN 37243 (615) 532-0625

## CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) STATE OPERATING PERMIT (SOP) NOTICE OF INTENT (NOI)

Type of permit you are required Application type:	_ N	lew Permit	(designed to discharge)  tted for Permit Modification	Permit	0000) (no discharge Reissuance provide the existing	Pe	iknown, pleasc rmit Modification mumber:
Ones i man la management		THOT IS SUDITE	ind to 1 of the Wilder	OI TOURS CALLED	partice the existing	periin memi	, married
OPERATION IDENTIFIC  Operation Name:		(m	(TN A00007	5)		County:	Marion
The second secon		· consequences					35,20976
Operation Location/ 2. Physical Address:	75 UW	derein	4 pd .37397				
	Mitwi	III LN	. 3 /34 /			Longitude	-85.458
Name and distance to near			Commission and the contract to		-14 - 10km - 1 may the experience of the control		
If any other State or Federa	al Water/Waste	water Permits	s have been obtained for	this site, list t	hose permit numbe	ers:	
Animal Type:	Poultry [	Swine	Dairy	Beef	Other	The second secon	- a commence works
Number of Animals: 7	7,000	Number	of Barns: 3	Nan	ne of Integrator:	roch for	od
Type of Animal Waste Mai (check all that apply)		<b>⊠</b> D □ L □ L		A to the first state of the sta	The second secon		
Attach the NMP XNM	IP Attached	Attach the cl	losure plan 🔀 Closure	Plan Attache	ed Attach a tope	ographic map	Map Atta
PERMITTEE IDENTIFICA	ATION						
Official Contact (applicant):			Title or Position:		, .		
Authory	B. Morr	(300)		WNer,	10perati	r	Correspond
275 Vandera	criff R	A	City: Whitwe	$\mathcal{M}^{-2}$	TN.	37397	Invoice
Authory Mailing Address:  275 Vawderg Phone number(s):  423-68			E-mail:	1 Sea M	operate Tu, misowany	Was Can	JA Bronce
Optional Contact:	50-02	· -	Title or Position:	L/00/140	11/40/2017	any ican	
re-and an analysis of the second seco	Note that the second second second			***************************************	g one of the graph of the system and the		
Address:			City:		State:	Zip:	Correspond
Phone number(s):	er er gje er er e kallen op gegegen geregen er	Community (1980) and the state of the state	E-mail:				Invoice
Application Comme	ION AND FROM		an signed in accordance	with the sec-	romante of Duly 1	200 A & 0.60	The second secon
APPLICATION CERTIFICATE  I certify under penalty							on or superv
in accordance with a s					•	-	•
submitted. Based on m	y inquiry of	the persor	or persons who ma	nage the sy	ystem, or those	persons di	rectly respons
	,		n submitted is, to the			,	,
	that there as	-	•	mitting fals	se information,	including	the possibilit
complete. I am aware			D.				<u></u>
for gathering the infor- complete. I am aware fine and imprisonment Name and title; print or type		z violation	Sigi	ature		D	ate
complete. I am aware fine and imprisonment Name and title; print or type	for knowing	wwer/o	Sign	to 1	Monin	D	5-17-20
complete. I am aware fine and imprisonment Name and title; print or type	for knowing		Sign	Atto 1	Monin	D	5-17-20
complete. I am aware fine and imprisonment Name and title; print or type  Authory Monte	for knowing		Sign	da, 1	& E Aquatic Fauna		5-17-20.

#### **ANNUAL REPORT**

Operation Name: A &L Farm
Date Submitted: 5 - 17 - 2011

Number and types of animals on site.	Types:	Number:	٦.
	Broiler	87,0	000
Estimated amount of litter, compost and/or process wastewater	Amount:		
generated in the previous calendar year.	5	148 TO	»NS
Estimated amount of litter, compost and/or process wastewater	Amount Tra	ansferred:	· ·
transferred to a 3rd party in the previous calendar year.	5	48 TO	) NS
Total number of acres for land application covered by the nutrient	Acres:	17 N	
management plan.		8/ P	10
5. Total number of acres under control of the landowner that were used for	Acres:		
land application of litter and compost in the previous calendar year.		<b>ン</b>	
6. Summary of all litter, compost and/or process wastewater discharges to	Date:	Time:	Volume:
waters of the state from the production area that have occurred in the			
previous calendar year, include date, time and approximate volume.			
7. The current version of the Comprehensive Nutrient Management Plan	Yes/No)	Comments	3:
was developed and/or approved by a certified nutrient management planner.			
certify under penalty of law that this document and all attachments were pri	epared unde	er my dire	ction or

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed Name

Date: 5-2-204

Mail a completed form to the following agencies:
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
6th Floor L&C Annex, 401 Church Street
Nashville, TN 37243

and

Tennessee Department of Agriculture Ellington Agricultural Center P.O. Box 40627

Nashville, TN 37204

06-68211

#### **Nutrient Management Plan - Poultry**

For Use by Farms

**Exporting 100% of Litter Generated** 

Is ALL Litter Hauled Offsite*  *If the answer is "No," do not complete this form.  First Name:  Last Name:  Marion  Tennessee County:  2. Volumes and Calculations  Poultry Type:  Broiler  Pullet  Layer  circle the type(s)  Number of birds per house per grow-out:  Number of Houses:  Number of Houses:  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in inter calculations.  Market/ Mature  Weight (lbs)  Grow-Out  Small (3.8 - 5 .8)  2.1  Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use	1. Farmer/ Producer Info			da new parties	tidergerale in Apple
First Name:  Last Name:  Morrison  Farm/ Operation Name:  Tennessee County:  2. Volumes and Calculations  Poultry Type:  Broiler  Pullet  Layer  circle the type(s)  Number of birds per house per grow-out:  Number of Houses:  Number of Houses:  3  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Type of Bird  Weight (libs)  Broilers  Broilers  Broilers  Layer  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use  2. 1	Is ALL Litter Hauled Offsite*	·	SALVANO DEL TELLE SE LE LES TRANSPORTERS DE L'ANGEL PROPRENT L'ANGEL PROPRENT L'ANGEL PROPRE L'A		
Farm/ Operation Name:  Tennessee County:  Marion  2. Volumes and Calculations  Poultry Type:  Broiler  Pullet Layer circle the type(s)  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house. Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Number of Houses:  Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use)  At layer  Broilers  Broilers	*If the answer is "No," do not cor	mplete this form.		Please circle	one .
Farm/ Operation Name:  Farm/ Operation Name:  A+L Facm  Tennessee County:  Macion  2. Volumes and Calculations  Poultry Type:  Broiler Pullet Layer circle the type(s)  Number of birds per house per grow-out:  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs.)/ Bird / Grow-Out  Small (3.8 - 5 .8)  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use	First Name:	Authory	/		
2. Volumes and Calculations  Poultry Type:  Broiler Pullet Layer circle the type(s)  Number of birds per house per grow-out:  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Type of Bird Weight (lbs) Grow-Out small (3.8 - 5.8) 2.1  Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use	Last Name:	morris	UP)		
Poultry Type:    Broiler   Pullet   Layer	Farm/ Operation Name:	A+LE	arm		
Poultry Type:    Broiler   Pullet   Layer	Tennessee County:	mario	N		
Poultry Type:    Broiler   Pullet   Layer	2. Volumes and Calculati				
Number of birds per house per grow-out:  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Number of Houses:  Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use)  Are amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in litter calculations.  Avg. Weight of Litter Produced (lbs.)/ Bird / Grow-Out  Small (3.8 - 5 .8)  2.1  Layer  8 - 12  8	and the second s			1	
Number of birds per house per grow-out:  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs.) Bird / Grow-Out small (3.8 - 5.8)  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs.) Bird / Grow-Out Small (3.8 - 5.8)  Layer 8 - 12 8	Poultry Type:		Broller		· · · · · · · · · · · · · · · · · · ·
Number of birds per house per grow-out:  The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Number of Houses:  Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use)  Are growed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs.) Bird / Grow-Out  Small (3.8 - 5 .8) 2.1  Broilers large (5.9 - 7+) 2.4  Layer 8 - 12 8			!		
vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs)/ Bird / Grow-Out small (3.8 - 5.8) 2.1  Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use 2.1		<b>3</b> 1.72 (4.5)	The amount of	litter removed fron	a poultry house will
Size of birds, and length of time birds are kept in house.  Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs.) / Bird / Grow-Out  Small (3.8 - 5 .8)  Average Weight of Litter Produced (lbs.) / Bird / Grow-Out (see Table at right or use	· · · · · · · · · · · · · · · · · · ·	29,000	•		
Number of Houses:  System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs.) Bird / Grow-Out Small (3.8 - 5 .8)  Average Weight of Litter Produced (lbs.) Bird / Grow-Out (see Table at right or use  System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.  Avg. Weight of Litter Produced (lbs.) Bird / Grow-Out Small (3.8 - 5 .8)  Layer 8 - 12  Broilers large (5.9 - 7+)  Layer 8 - 12  Broilers large (5.9 - 7+)  Layer 8 - 12	-		=		
Number of Houses:    Avg. Weight of Litter   Type of Bird   Weight (lbs)   Grow-Out		1.45		· · · · · · · · · · · · · · · · · · ·	
Number of Grow-Outs / Year:  Avg. Weight of Litter Produced (lbs.) / Bird / Grow-Out  Small (3.8 - 5 .8)  Broilers   large (5.9 - 7+)   2.4  Layer   8 - 12   8  Average Weight of Litter Produced (lbs.) / Bird / Grow-Out (see Table at right or use		2			•
Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.) / Bird / Grow-Out (see Table at right or use  Market/ Mature Weight (lbs) Grow-Out (see Table at right or use  Market/ Mature Weight (lbs.) / Bird / Grow-Out (see Table at right or use  Market/ Mature Weight (lbs.) / Bird / Grow-Out (see Table at right or use)  Produced (lbs.) / Bird / Grow-Out (see Table at right or use)  Market/ Mature Weight (lbs.) Sird / Grow-Out (see Table at right or use)	Number of Houses:		umount produc	eu per vira ana ass	
Number of Grow-Outs / Year:  Broilers   Sandle (3.8 - 5 .8)   2.1    Broilers   Sandle (5.9 - 7+)   2.4    Layer   Sandle (10 - 7+)   2.4    Layer   Sandle (10 - 7+)   3.4    Broilers   Sandle (10 - 7+)   2.4    Layer   Sandle (10 - 7+)   3.4    Layer   Sandle (10 - 7+)   3.4				Market/ Massura	
Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use  small (3.8 - 5 .8)  2.1  Broilers large (5.9 - 7+)  Layer 8 - 12  8			Type of Bled	1 '	• • •
Number of Grow-Outs / Year:  Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out (see Table at right or use  Broilers large (5.9 - 7+) 2.4  Layer 8 - 12 8			Type of Bird	· · · · · · · · · · · · · · · · · · ·	
Average Weight of Litter Produced (lbs.)/ Bird / Grow- Out (see Table at right or use		<del>apatraparti an</del>		Sinak (5. 6 - 5.8)	2.1
Average Weight of Litter Produced (lbs.)/ Bird / Grow- Out (see Table at right or use	: Number of Grow-Outs / Vear	. 6	Broilers	large (5.9 - 74)	2 Δ
Average Weight of Litter Produced (lbs.)/ Bird / Grow- Out (see Table at right or use	Transport of Glott-Gats / Teat.		1	<u> </u>	
Out (see Table at right or use 2, 1	Average Weight of Litter				
	the state of the s		H		
your farm average if known)   Pullet 5.5   3	• • • • • • • • • • • • • • • • • • • •	2.1			
	• • • • • • • • • • • • • • • • • • • •	Key Column Abo	Pullet  ove and Below to	5.5 Assist in Calculatin	3 ng Values Below
Number of Birds per Grow-Out = A x B =	Out (see Table at right or use your farm average if known)  Take Bolded Letters in	•		<u> </u>	
Number of Birds Example: IFA = 22,000, and B = 2, and C = 5.5 than	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Ou	ut = A x B =	ove and Below to	Assist in Calculatin	g Values Below
Number of Rieds Evample: If A = 22,000, and R= 2, and C= 5.5 then	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Ou  Number of Birds Example: If A = 2	ut = A x B = 22,000 and B= 2	ove and Below to	Assist in Calculatin	g Values Below
Number of Birds Example: If A = 22,000 and B= 2 and C= 5.5 then: 22,000 X 2 = 44,000 number of birds	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Ou  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of bir	ut = A x B = 22,000 and B= 2	ove and Below to	Assist in Calculatin	ng Values Below
Number of Birds Example: If A = 22,000 and B= 2 and C= 5.5 then:  22,000 X 2 = 44,000 number of birds	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Out  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of birds	ut = A x B = 22,000 and B= 2 rds	ove and Below to	Assist in Calculatin	ng Values Below
Number of Birds Example: If A = 22,000 and B= 2 and C= 5.5 then:  22,000 X 2 = 44,000 number of birds  Number of Birds per Year = A x B x C =	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Ou  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of birds  Number of Birds per Year = A	ut = A x B = 22,000 and B= 2 rds x B x C =	ove and Below to  Too 0  and C= 5.5 then.	Assist in Calculatin	ng Values Below Pic ( ) to Dic ( )
Number of Birds Example: If A = 22,000 and B= 2 and C= 5.5 then:  22,000 X 2 = 44,000 number of birds  Number of Birds per Year = A x B x C =	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Out  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of bird  Number of Birds per Year = A  Number of Birds per Year Example	ut = A x B = 22,000 and B= 2 rds x B x C = e: If A = 22,000 a	ove and Below to	Assist in Calculatin	ng Values Below Pic ( ) to Dic ( )
Number of Birds Example: If A = 22,000 and B = 2 and C = 5.5 then:  22,000 X 2 = 44,000 number of birds  Number of Birds per Year = A x B x C =  Number of Birds per Year Example: If A = 22,000 and B = 2 and C = 5.5 then:  22,000 x 2 x 5.5 = 242,000 number of birds per year	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Out  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of bird  Number of Birds per Year = A  Number of Birds per Year Example  22,000 x 2 x 5.5 = 242,000 number	at = A x B = 22,000 and B = 2 rds  x B x C = e: If A = 22,000 a r of birds per year	ove and Below to  and $C=5.5$ then:  and $B\approx 2$ and $C=3$	Assist in Calculatin	g Values Below  Property Control  Property Contr
Number of Birds Example: If A = 22,000 and B = 2 and C = 5.5 then:  22,000 X 2 = 44,000 number of birds  Number of Birds per Year = A x B x C =  Number of Birds per Year Example: If A = 22,000 and B = 2 and C = 5.5 then:  22,000 x 2 x 5.5 = 242,000 number of birds per year  Total Tons of Litter Produced per Year on the Farm = E x D / 2,000 =	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Out  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of birds  Number of Birds per Year = A  Number of Birds per Year Example  22,000 X 2 X 5.5 = 242,000 number  Total Tons of Litter Produced	ut = A x B = 22,000 and B = 2 rds  x B x C = e: If A = 22,000 a r of birds per year	ove and Below to	Assist in Calculatin  522,000  5.5 then:	g Values Below  Property Control  Property Contr
Number of Birds Example: If A = 22,000 and B = 2 and C = 5.5 then:  22,000 X 2 = 44,000 number of birds  Number of Birds per Year = A x B x C =  Number of Birds per Year Example: If A = 22,000 and B = 2 and C = 5.5 then:  22,000 x 2 x 5.5 = 242,000 number of birds per year  Total Tons of Litter Produced per Year on the Farm = E x D / 2,000 =  Tons of Litter Produced Example: If E = 242,000 and D = 2.1 lbs. then:	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Ou  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of bir  Number of Birds per Year = A  Number of Birds per Year Example  22,000 X 2 X 5.5 = 242,000 number  Total Tons of Litter Produced  Tons of Litter Produced Example:	at = A x B = 22,000 and B = 2 rds  x B x C = e: If A = 22,000 ar of birds per yea  per Year on the If E = 242,000 ar	ove and Below to $37.000$ and C= 5.5 then.  and B= 2 and C =  or  e Farm = E x D /  and D = 2.1 lbs. the	Assist in Calculatin  522,000  5.5 then:	g Values Below  Property Control  Property Contr
Number of Birds Example: If $A = 22,000$ and $B = 2$ and $C = 5.5$ then:  22,000 X $2 = 44,000$ number of birds  Number of Birds per Year = A x B x C =  Number of Birds per Year Example: If $A = 22,000$ and $B = 2$ and $C = 5.5$ then:  22,000 x 2 x 5.5 = 242,000 number of birds per year  Total Tons of Litter Produced per Year on the Farm = E x D / 2,000 =	Out (see Table at right or use your farm average if known)  Take Bolded Letters in  Number of Birds per Grow-Ou  Number of Birds Example: If A = 2  22,000 X 2 = 44,000 number of bir  Number of Birds per Year = A  Number of Birds per Year Example  22,000 X 2 X 5.5 = 242,000 number  Total Tons of Litter Produced  Tons of Litter Produced Example:  242,000 X 2.1 lbs = 508,200 lbs. /	at = A x B = 22,000 and B = 2 rds  x B x C = e: If A = 22,000 ar of birds per year per Year on the If E = 242,000 ar 2,000 = 254 Tons	ove and Below to $37.000$ and C= 5.5 then.  and B= 2 and C =  or  e Farm = E x D /  and D = 2.1 lbs. the	Assist in Calculatin  522,000  5.5 then:	g Values Below  Property Control  Property Contr

### AGRICULTURAL DIAGNOSTIC LABORATORY UNIVERSITY OF ARKANSAS - FAYETTEVILLE

\*\*\*MANURE FOR FERTILIZER ANALYSIS (report for AGRI-429)

Name:	The state of the s	ANTHONY MORE		Received in lab:	5/20/2011	
Address:	275 VANDERG	RIFF RD		Mailed:	5/26/2011	
City:	WHITWELL			State,Zip:	TN 37397	
County:	MARION			CK#;	3948	
Lab. No.	M10874					
Sample No.	NONE GIVEN					
Animal type	broilers					
-age/lbs	4.25 lbs					
Bedding type	none given					
Manure type	cleanout					
Sample date	5/17/2011					
Age of manure	4 months	-		************		
pН	7.9					
EC(umhos/cm)	14810					,
% H20	18.00					The second secon
		-on dry bas	sis-			
Total %N	3.96					***************************************
Total %P	1.56					
Total %K	3.38			-		
Total %Ca	3.52					
Total %Carbon	35.38				***************************************	
NO3-N, mg/kg					-	
NH4-N, mg/kg						
			***			
		-on as-is ba	18 3-			
Total %N	3.25					
Total %P	1.28					
Total %K	2.77					
Total %Ca	2.89					was a second
Total %Carbon	29.01					
NO3-N, mg/kg						
NH4-N, mg/kg					-	
		-lbs/ton on a	as-is basis-			
N	65.0					
P2O5	58.6					
K20	67.0					
Ca	57.8					
Total Carbon	580.2					
NO3-N						
NH4-N				-		

<sup>\*\*\*</sup>all analyses performed on "as-is" basis/ "dry" basis is calculated from moisture content

ing pagamanan ang pagaman Pagamanan ang pagamanan an After a facility

<sup>\*</sup>Ibs/ton P2O5 = %Total P on "as-is" basis multiplied by 20\*2.29

<sup>\*</sup>lbs/ton K2O = %Total K on "as-is" basis multiplied by 20\*1.2